CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

S-E-C-R-E-T
NOFORN

COUNTRY	Czechoslovakia	REPORT	25X1
SUBJECT	J.V. Stalin Works in Martin	DATE DISTR.	8 April 1955
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This is UNEVALUATED Information

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

1. The J.V. Stalin Works (Zavody J.V. Stalina) National Enterprise, formerly known as the J. V. Stalin Plant of CKD Sokolovo, National Enterprise, or as CKD Krivan, in Martin (Turciansky Svaty Martin - N 49/04, E 18-56) is set up as shown on the sketches (Annexes A to G). The plant is surrounded by a fence 2½ meters high, of concrete blocks along the north and south sides, the remainder of barbed wire. It is guarded by a works guard 70 strong, half of whom are women, about 150 militia, two guard towers, and police dogs. The guards are armed with 9-mm. automatics, CZ 7.65-mm. pistols, and caliber 7.92 rifles model 24. All entrances are guarded and the yard is patrolled. A special pass is required for entry to the factory. 25X1

2. Raw materials are received from the following sources:

   Ingots for the foundry: Vitkovice Klement Gottwald Iron Works in Vitkovice (N49-49, E18-16).
   Rolled profile material and plates: Vitkovice Iron Works.
   Forged material: CKD Sokolovo plant in Prague-Vysocany.
   Tools (special tools and instruments such as for measuring calibers): V.I. Lenin Works in Pilsen.
   Measuring instruments such as micrometers, slide rules, and standard calibers: Meopta Kosire in Prague-Kosire.
   Coal: from Handlova (N48-44, E18-46).
   Grinding wheels: partly imported from Germany.
   Cutting alloys: imported from Switzerland and in some cases from the USSR.
   Work benches: all machine tools and hand assembly tools were supplied by Technomat, Prague-Mala Strana.
   Sand for the foundries: from a pit about 20 kilometers east of Martin.
   Electrodes: Technomat, Prague-Mala Strana.

3. From January to October 1952, three series each of 15 T-34 tanks were completed, and a further series was in production. Castings for hand grenades and projectiles are also produced here. The average fulfillment of the five-year plan is about 45%.

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STATE	X	ARMY	EVX	NAVY	X	AIR	X	FBI		[redacted]		[redacted]			

(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

From mid-1951 to mid-1952 the factory showed a deficit of 13,500,000 crowns.

4. Morale of workers is poor, absenteeism high. Classes for political instruction are held about once a month in the evenings. Propaganda posters, newssheets, and pictures of Soviet leaders are numerous. There are about 7,000 workers, of whom approximately 60 percent are women. About 440 skilled workers from Prague and from the V. I. Lenin Works in Pilsen are employed, partly to instruct unskilled workers. Management personnel include:

Manager: Jiri Mandaus, a former army colonel, popular and good at his job.

Deputy manager: Frantisek Pokorny, engineer, Communist.

Chief accountant: Karel Volko, Communist.

Production manager: Nemec (fnu), engineer, Communist.

Chief motorshop engineer: Josef Jelinek, not a Communist, an expert.

5. Shot Mold for Defensive Grenades:

The shot is made of gray pig iron poured into sand molds, so that traces of sand are still to be seen on it. Its height:90 mm.; width: about 65 mm. The thickness of the wall is 4-6 mm. The mold is ground and packed in lots of 500 into crates and sent to other plants for completion and final finishing. three series of 1,500 had been made. Production of one series took about a month. Plans and models were made at the plant. 25X1

6. Mold for 125-mm. Cannon Shell:

The cast is made of gray pig iron; it is poured into rotating iron molds. The material poured into the molds is held to the sides by centrifugal force as the result of rotation until the material hardens and cools a little. Only the top part is machined by grinding. Finished products are sent to an unknown destination for further processing. The mold cast is 320 mm. high; its diameter is 125 mm. The thickness of the wall at the strongest point is up to 14 mm. The wall is about 12 mm. thick at the bottom and about 8 mm. on top. The diameter of the upper aperture is about 20 mm.

ANNEX A

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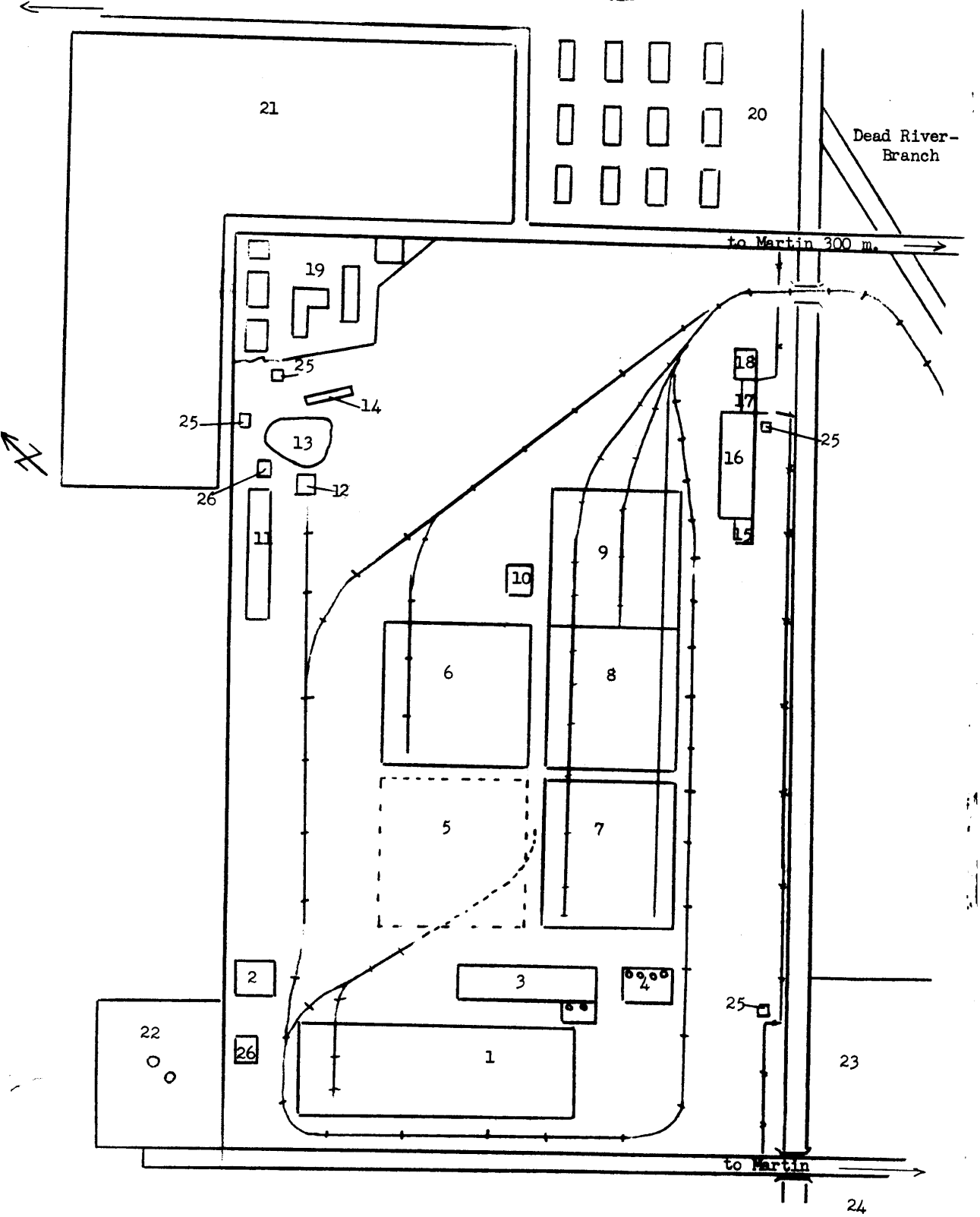
To Tourist Cabin on
Martincke Hole Mountain

J.V. Stalin Plant in Martin



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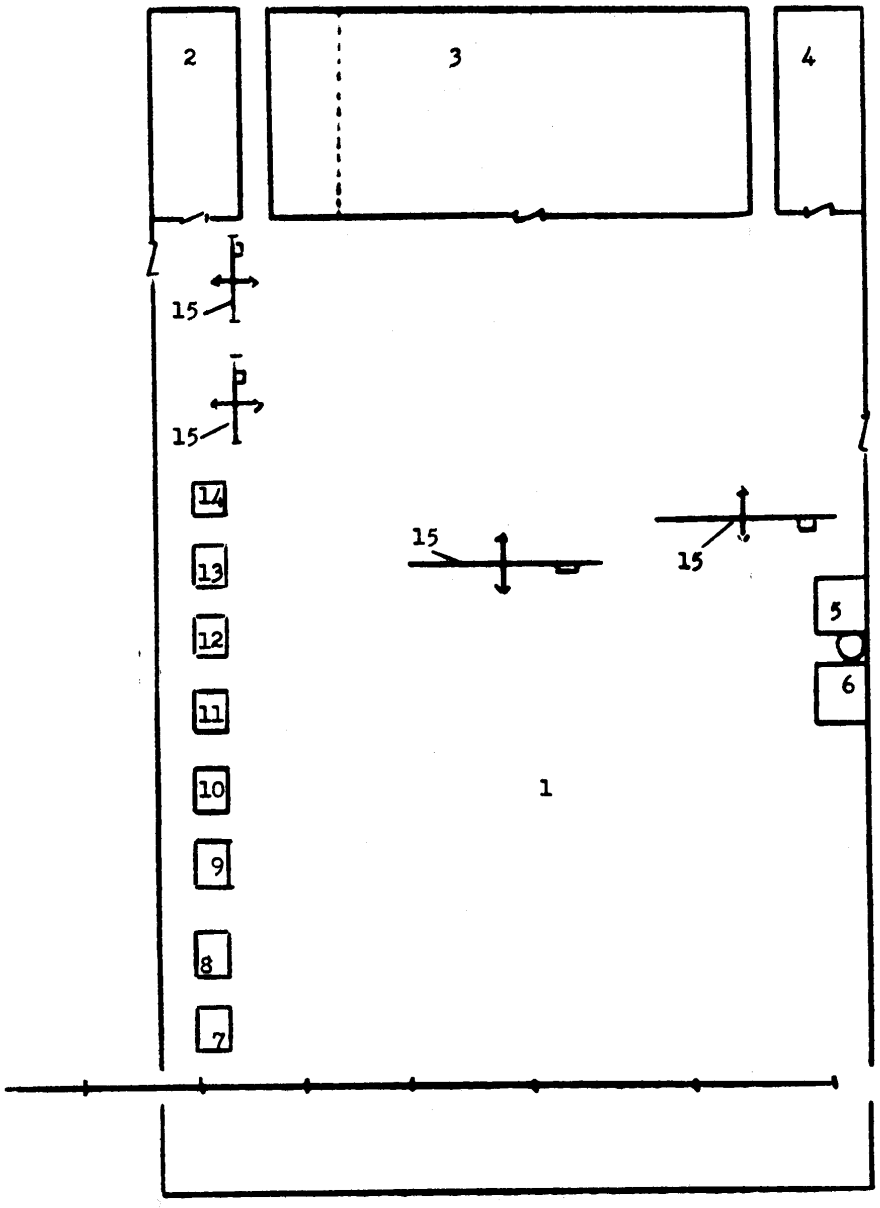
Legend to the plan of the Stalin Works in Martin

1. Foundry, 130 x 80 x 12 meters.
2. Pattern shop, 40 x 40 x 8 meters.
3. Cleaning shop for sand for the casting house, 80 x 30 x 6 meters. A machine sifts the sand, which is sprayed with steam to keep its ductility.
4. Boiler house, 30 x 15 x 6 meters. Four old locomotives are used as boilers which supply steam to the whole plant.
5. Unfinished steel works. Building began in February 1952; when informant left the plant, the walls and roof were finished, 100 x 70 x 8 meters.
6. New machine shop, containing tool and engine shop, 100 x 80 x 7 meters.
7. Welding shop, 80 x 80 x 12 meters.
8. Machining shop, 80 x 70 x 12 meters.
9. Assembly shop, 80 x 70 x 10 meters.
10. Concrete loading ramp.
11. Store for electrotechnical materials and tools, 100 x 20 x 5 meters.
12. Locomotive shed, 15 x 8 x 6 meters.
13. Pond.
14. Culture and propaganda department. Stables, 15 x 6 x 5 meters, with four pigs, two horses, and poultry; also housed the plant photographer.
15. Kitchen. Supplies 11 dining rooms, of which some are outside the factory.
16. Administration, 120 x 50 meters; five stories.
17. Main gatekeeper's lodge, 7 x 15 x 4 meters.
18. Brigade administration, cloakroom and baths, 30 x 30 x 5 meters.
19. Houses for officers from adjoining barracks, apartments for works guard, girls' boarding school, and works guard stores.
20. About 30 wooden huts, where workers are housed, called "V Podhaji".
21. Tank corps and artillery barracks.
22. Kiln.
23. Store of wood for cellulose works.
24. Cellulose works.
25. Guard post.
26. Wooden guard tower.

Building No. 1



Legend to the plan of Building No. 1

1. Two casting fields, one for nonferrous metals, the other for cast iron.

2. Lavatories and washrooms.

3. Dining room.

4. Lavatories and washroom.

5. Electric smelting furnace, of Soviet manufacture, made in 1948, for cast iron.

6. Electric smelting furnace, of Soviet manufacture, made in 1948, for nonferrous metals. Both furnaces have already burned out twice.

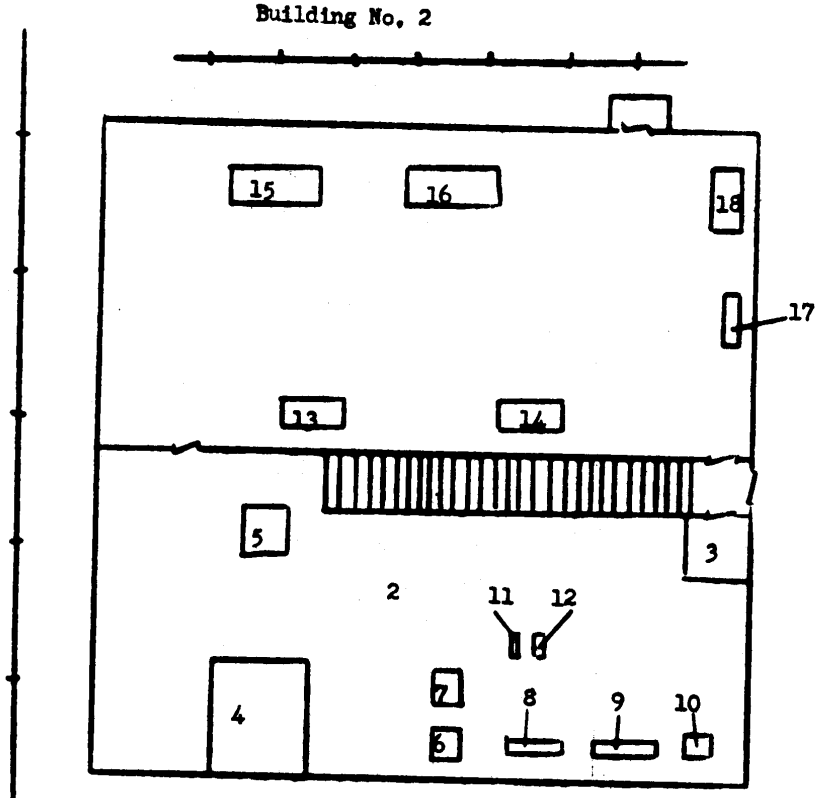
7. to 14. Machine moldings;the mold stands on the bench, where it is shaken until the sand settles completedly around the mold.

15. Overhead mobile cranes; 10 tons moving crosswise, 15 tons lengthwise.

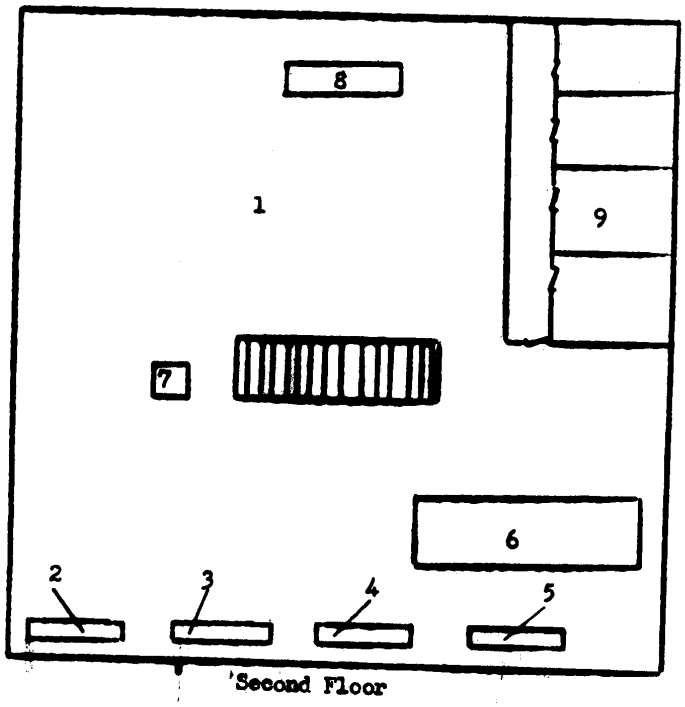
ANNEX C

25X1

Building No. 2



First Floor



Second Floor

ANNEX C

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Legend to the plan of Building No. 2, wood and metal modelling plant

1. Store of planks, preparation of material and production.
2. Pattern shop.
3. Guard post.
4. Energy polishing and coloring of models.
5. Hand production.
6. - 7. Circular saws.
8. - 9. Lathes for wood.
10. Boring machine.
11. - 12. Milling machines for wood.
13. - 14. Planing machines.
15. - 16. Milling machines for making grooves.
17. Planing machine.
18. Combination saw and planing machine. There are a few working benches in the workshops.

2nd floor: metal modelling shop

1. Modelling shop proper.
2. MAS lathe, five years old, with a reach of 1,700 mm. length and 400 mm. width.
3. MAS planing machine, 1,500 mm. length, 800 mm. width, five years old.
4. MAS lathe, five years old, reach of 1,500 mm. length, 300 mm. width.
5. General purpose milling machine, TOS, semiautomatic, five years old.
6. Hand modelling shop (a few pneumatic grinders).
7. Shaping machine - planing machine.
8. Finishing and polishing of models.
9. Offices of the section.

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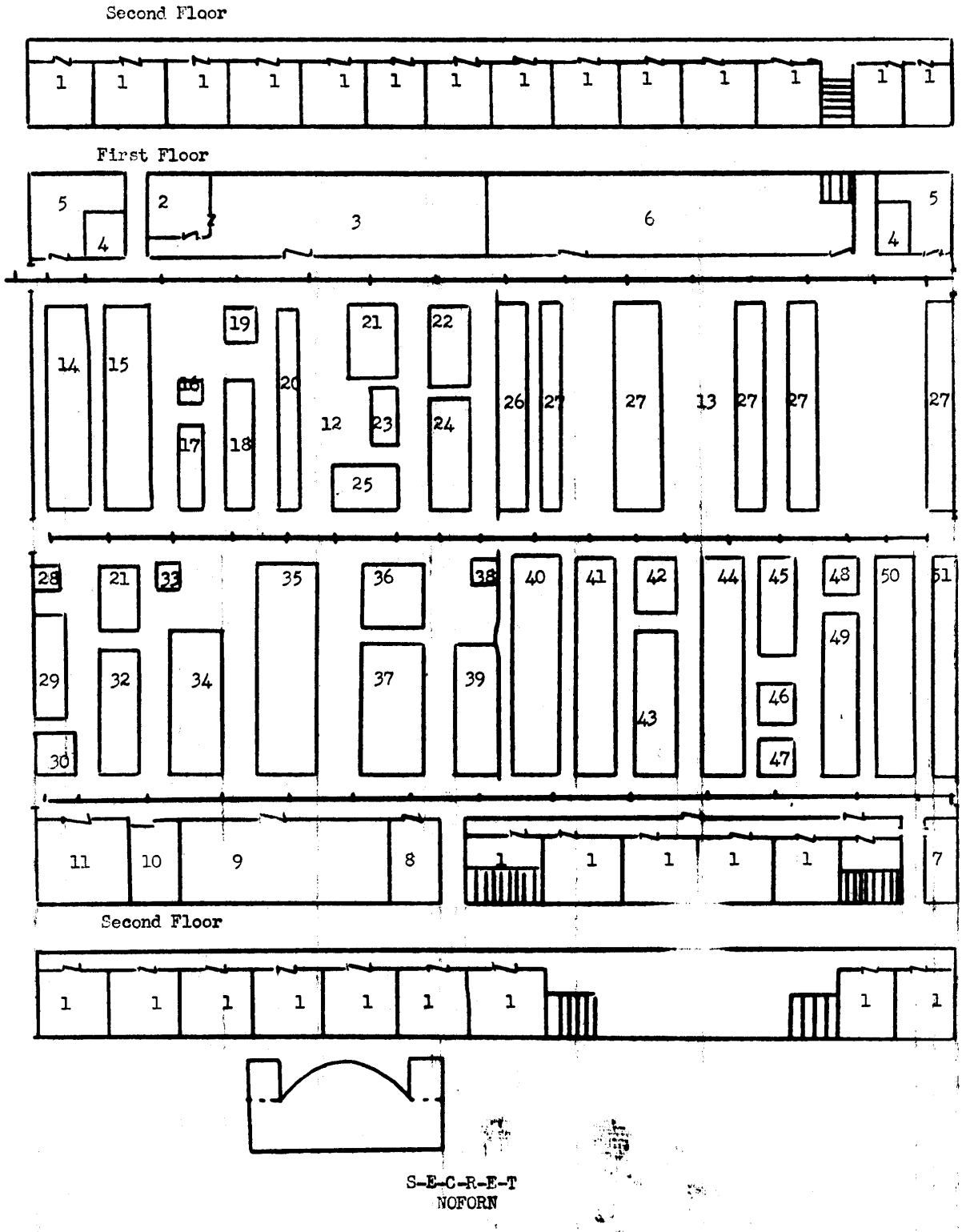
Building No. 6



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Legend to the plan of Building No. 6, small turning shop

1. Offices.
2. Baths.
3. Cloakroom.
4. Gatekeeper's post.
5. Cleaning materials store.
6. Dining room.
7. Lavatories.
8. Cleaning materials store.
9. Sharpening shop for tools: two Kamenicek grinders for sharpening forked blades; two grinders for grinding lathe and milling-machine blades, Kamenicek model; one Soviet grinder for grinding angle cutters for boring machines.
10. Testing room for hardening shop. Testing instruments are in crates and are taken out only when required. Informant did not see them.
11. Hardening shop: two electric furnaces, one oil bath and one water bath, one crude-oil furnace.
12. Machine workshop.
13. Engine assembly, workshop with special machines, distribution of tools.
14. Fourteen revolving lathes, semiautomatic, badly worn, TOS and MAS, made in 1950.
15. Twelve revolving lathes, TOS, MAS, Magdeburg.
16. Four screw cutting machines, for cutting nuts, to a diameter of 32 mm.
17. Six semiautomatic rolling machines for screws, to a diameter of 24 mm., model WUV (from East Germany), 1952.
18. Eight MAS lathes, reach of 1,500 mm. length, diameter 400 mm., 1952.
19. Office of the workshops.
20. Six small MAS lathes, eight medium-sized TOS lathes, of 2,800 revolutions, used for screw-cutting. Five large Skoda lathes, reach of 1,500 - 3,200 mm. by 400 - 1,000 mm., 1952.
21. Two planing machines, length 3,000 mm., width 1,200 mm., 1952.
22. Five shaping machines - planing machines, TOS, 1952.
23. Four horizontal milling machines, TOS; the bench is 1,400 mm. long, works to a height of 1,600 mm., 1952.
24. Four general-purpose milling machines, TOS, 1952.

25. Five vertical machines, TOS, 1952; they are placed in a star pattern and only three workers are needed to attend them.

26. Temporary store for finished parts for engines (exhaust pipes, pumps, welding elements, and electrical fittings and feed pumps).

27. Work benches.

28. Office of instrument shop.

29. Four horizontal milling machines, TOS, 1952.

30. Welding of hard metals for instruments; two welding machines, one welding transformer.

31. Three TOS grinding machines, 1952; two grind flat surfaces, one grinds round surfaces.

32. Four MAS lathes, 1952, and seven TOS 1952 lathes, semiautomatic; the TOS lathes have a reach of 1,700 by 400 mm. and can work from 14½ to 2,800 revolutions. The MAS lathes have a reach of 1,500 by 400 mm.

33. Turning-shop control.

34. Three 1936 Cincinnati lathes, reach of 2,200 by 600 mm.; five TOS 1952 lathes, 1,700 by 400 mm. The TOS are high-speed machines.

35. Eighteen TOS lathes, high-speed, 1952, 1,700 by 400 mm.; four TOS lathes like the preceding ones, but converted to copying lathes.

36. Two TOS grinders for flat surfaces, with a magnetized board.

37. Grinders for round surfaces, semiautomatic, MAS, 1952.

38. Offices of the workshop.

39. MAS boring machines, four Mark VR 6, one Cincinnati boring machine, 1936. These are radial boring machines with a rotating leg; four are fixed, two are twin-handed. The MAS are 1952 machines.

40. Central distribution shop for tools, No. 1. This is a two-story metal structure. On the ground floor are ordinary tools and on the second floor special instruments and measuring instruments.

41. Six special automatic hydraulic lathes for working on camshafts; WUV, 1952.

42. Four grinders for valves, WUV, 1952.

43. Three machining lathes for production of cogwheels, MAS, 1952; two machining lathes for cogwheels, of Soviet manufacture, out of use, because they did not stand up to the strain.

44. Swiss testing machine for injector pumps and jet outlet pipes, 1952.

45. Five vertical planing machines for production of cogwheels, TOS, 1952.

46. Two grinders for cogwheels, GB, Swiss, 1952.

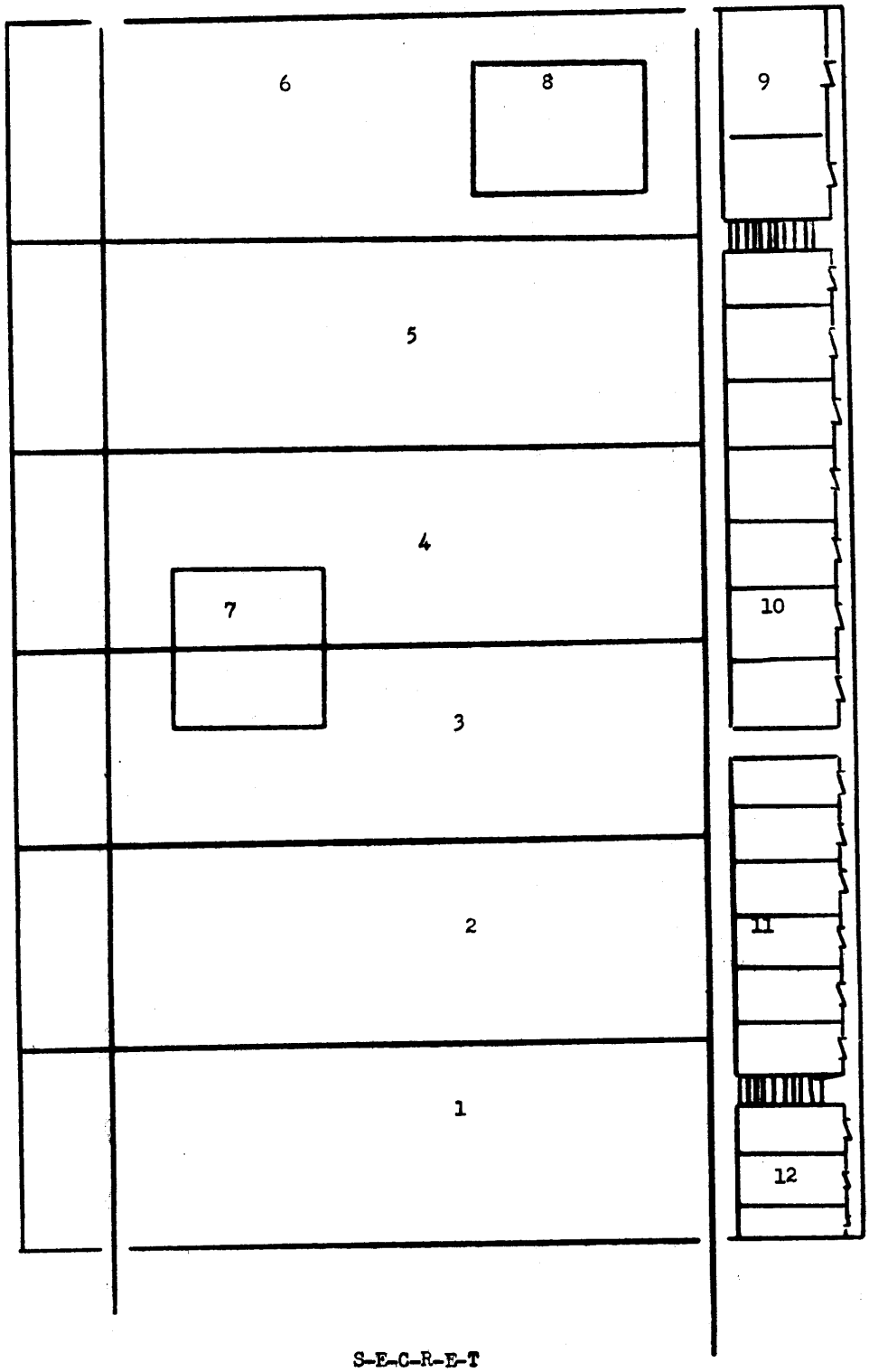
47. - 48. Swiss copying lathes, fully automatic, pneumatic copying equipment, GB, 1952.

49. Four machines for machining crankshafts, Swiss, GB, 1952. It takes a whole week to make one shaft on this machine.

50. Two special semiautomatic machines for drilling and finishing engine blocks, Swiss, 1952.

51. Piston-grinding shop, four Swiss 1952 grinders.

Building No. 7



ANNEX E

25X1

Legend to the plan of Building No. 7, body and welding shop

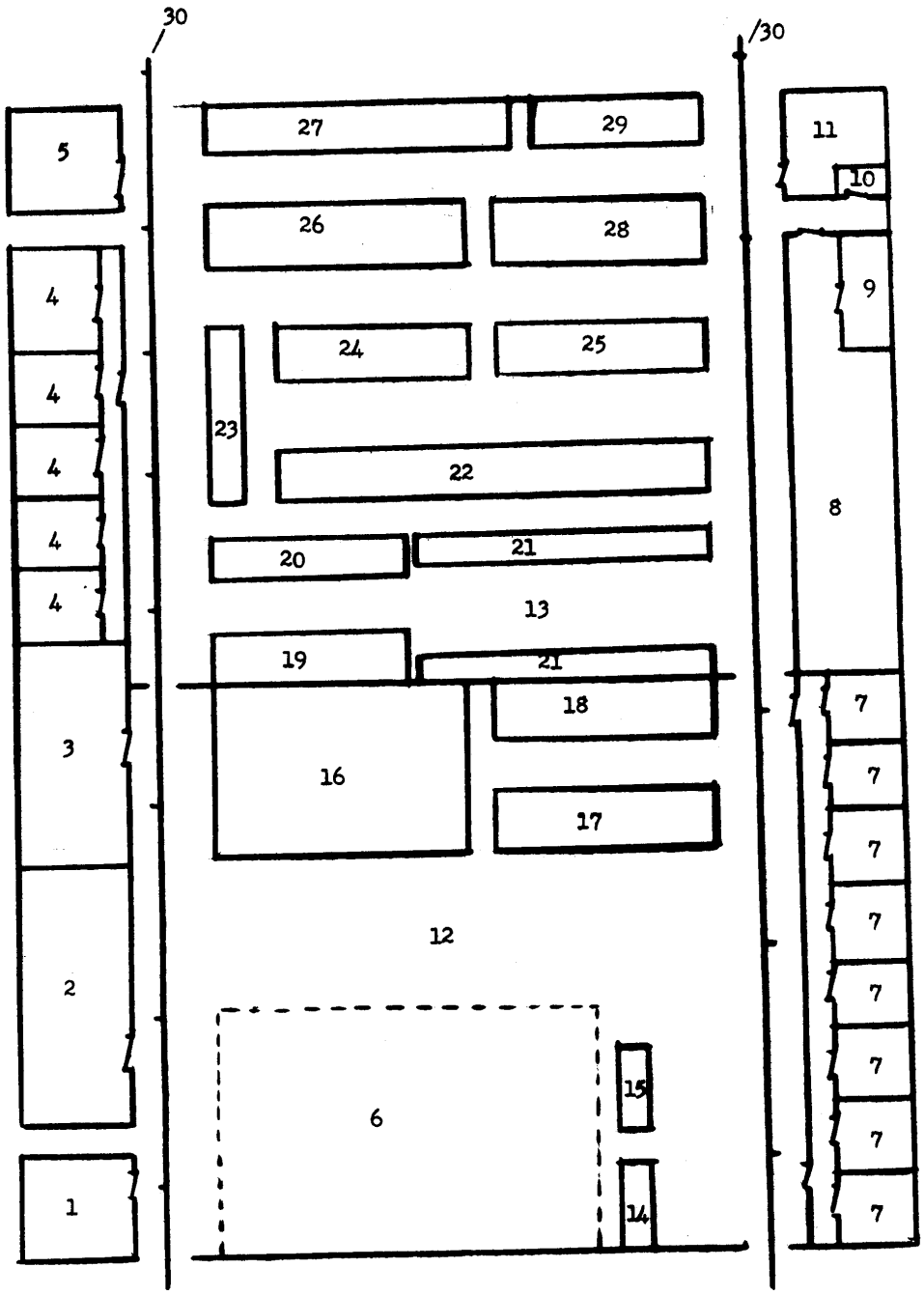
1. - 6. Welding fields equipped with about 40 mobile welding units; there are also about 20 electric hand grinders, 4 pneumatic hammers, and one mobile MAS boring machine.

7. Electric tempering furnace for welding tank plates (frames). It is divided into two parts. In one the tank is warmed up, and in the other it is tempered. Two tanks can be treated at the same time. Heating and cooling take 24 hours.

8. Rotation mechanism on which the body of the tank is turned around. From below it is also used for welding.

9. - 12. Section offices.

Building No. 8



Legend to the plan of Building No. 8, large turning shop

1. Lavatories.
2. Washrooms.
3. Cloakroom.
4. Offices.
5. Store for cleaning materials.
6. Store for materials: hammers, castings, parts for Wilson chamber, tracks, drivers' cabins. This is called the Waiting Store.
7. Section offices.
8. Cloakroom.
9. Washroom.
10. Gatekeepers' posts.
11. Lavatories.
12. Workshop A.
13. Workshop B.
14. Cutting machines for metal, cutting diameter 200 mm., TOS, 1952.
15. Circular cutting machines for metal, used for cutting profile material, Swiss, 1952.
16. Four horizontal milling machines, TOS, 1952, for finishing hammered iron for Wilson chambers.
17. Four Soviet turning tables, probably Kirov model [redacted] reach: 25X1 diameter 1,000 mm., 1952.
18. Same as No. 17.
19. Three Magdeburg turning tables, reach 1,200 mm., 1940.
20. Two Swiss turning tables, reach 600 mm., 1952. These work with an accuracy of up to 2/100 mm.
21. Mechanical benches with equipment for beginning the assembly of Wilson chambers.
22. Four Skoda lathes, 1952, reach 6,000 by 1,200 mm.
23. Four groove milling machines, TOS, 1952.
24. Six vertical milling machines, TOS, 1952. Length of bench 1,200 mm.
25. Nine horizontal milling machines, TOS, 1952.
26. Ten TOS, MAS, and Skoda lathes, reach 1,200 - 400 mm. by 400 - 800 mm.

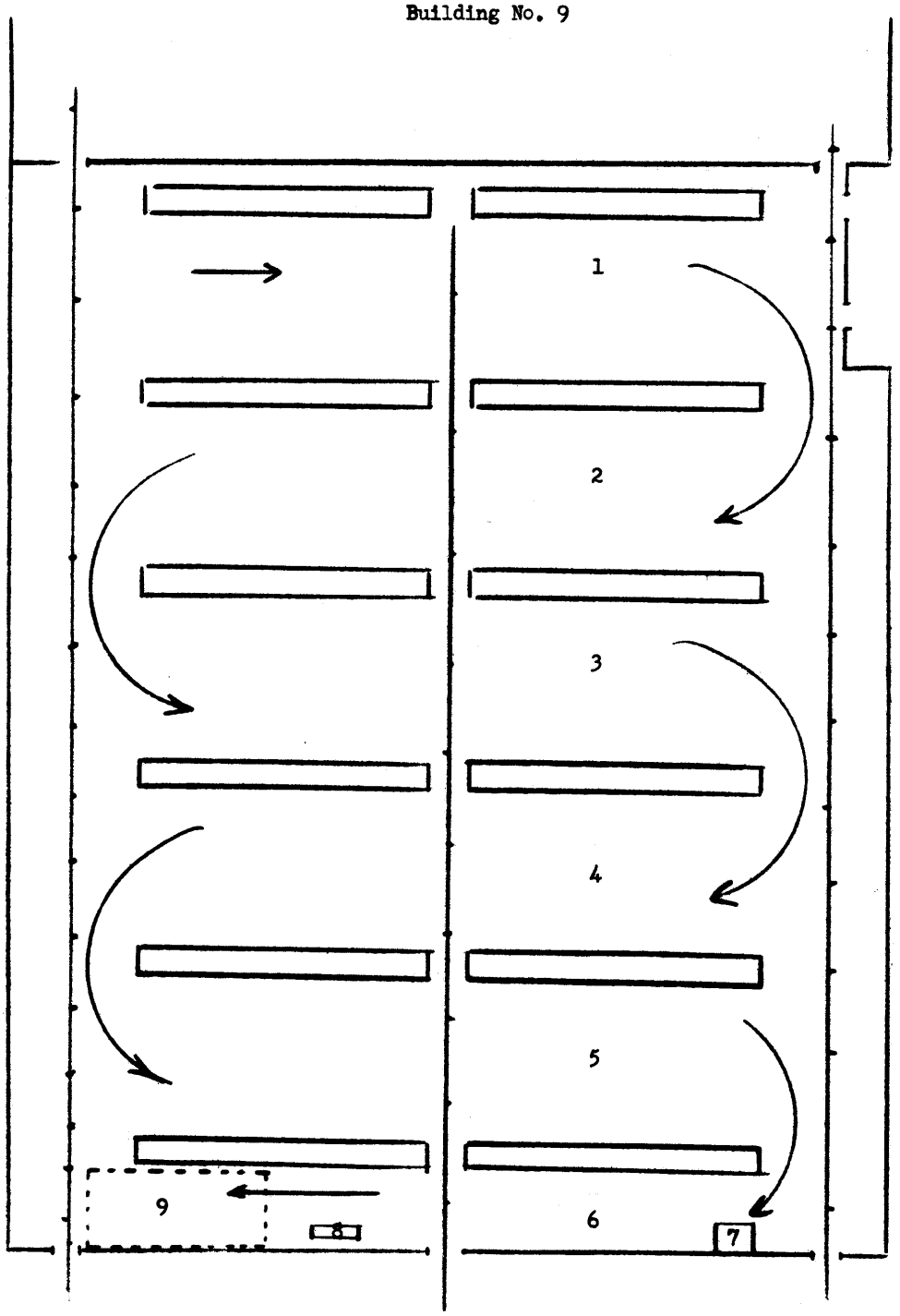
27. Six TOS lathes, three Skoda lathes, reach 1,700 - 400 mm. by 400 - 800 mm.

28. Five general-purpose milling machines, TOS, 1952.

29. Two Swiss planing machines, 1952, planing length 2,200 mm. Since these planing machines are driven by an engine of an unusual voltage, a special dynamo had to be installed for them to make the proper current. It is driven by an engine of normal voltage.

30. Tracks.

Building No. 9



Legend to the plan of Building No. 9, assembly shop

Assembly line No. 1 Assembly of Wilson chambers and tracks.

No. 2 Metal tanks are attached, nuts and hooks welded on to tank bodies, and the rear wall is made detachable.

No. 3 Tracks are put on the frame (body), springs for the wheels and driving shafts for the wheels mounted.

No. 4 Assembly of engines and radiators, connecting of all tubes, and then of those leading from the rear to the driving gear, assembly of back wheels.

No. 5 Assembly of middle and front wheels, appliances, turret base, electric equipment, and belts. Testing of the engine.

No. 6 Oiling, testing, and mounting of the turret, equipment with spare belts, tool case, spare fuel tank, spare parts and hand tools, two spare pumps.

No. 7 Filling with gas.

No. 8 Painting of the inside creamy white and the outside green.

No. 9 Installation of arms. This is done by the Czechoslovak Army, which takes delivery.

25X1